

tools “click-drag” the shape to various sizes, while the polygon tool will connect points with straight lines.

[1021] Selectable icon 204 is associated with a stamper tool. Selection of icon 204 will call up a pop-up menu box that offers the user a stamper selection set. The stamper selection set can include a variety of objects (e.g., animals) that can be “stamped” onto a scene visible on screen 110.

[1022] Selectable icon 205 is associated with an eraser tool. Selection of icon 205 will call up a pop-up menu box that offers the user his/her choice of a thin selective erase free-form line or a thick selective erase free-form line.

[1023] Selectable icon 206 is associated with a full screen erase tool. Selection of icon 206 will call up a pop-up menu box that allows the user his/her choice of several animated full-screen erase effects, such as a full screen erase with radiating lines from center (like ripples in a pond starting at center, accompanied by an explosion sound), a full screen erase with dissolve fade (like a static pattern slowly fading away, accompanied by a scratching sound), a full screen erase with a small “screen-eating” bug, accompanied by a munching sound), or a full screen erase with toilet flush swirl (slowly swirling inwards towards a central hole, accompanied by a whistle-slide down sound).

[1024] Selectable icon 207 is associated with a special effects tool. Selection of icon 207 will call up a pop-up menu box that enables various animated filters and effects such as a reverse-out effect that changes pixels from one state to the opposite state (ON/OFF) when screen 110 is touched, a rotate 90 degrees effect that rotates the whole screen by 90-degree increments when screen 110 is touched, a mirror x effect that copies/mirrors the whole screen

by 180 degrees symmetrically across the x-axis, and a mirror y effect that copies/mirrors the whole screen by 180 degrees symmetrically across the y-axis.

[1025] Selectable icon 208 is associated with a save file tool that enables saving and recalling files from memory.

[1026] Finally, selectable icon 209 is associated with a home button. Selection of icon 209 will call up the activity menu box.

[1027] In general, selectable icons 201-209 on toolbar menu 112 provide the user with access to a core set of tools that can be applied to various activities. These activities may be supported by the base system software or may be supported by expansion cartridge 130. The core set of tools represents a significant point of interaction and familiarity for the user of hand-held electronic toy 100. In particular, it is believed that the user will be more familiar with the core set of tools as opposed to the particular activities to which the core set of tools will be applied. This results because the tools are portable across a variety of activities. While the particular application of the tools to the various activities can vary, the core functional aspect of the tools themselves will be left relatively unchanged.

[1028] For example, the stamper tool can be applied to a variety of drawing activities. While the basic functionality of the stamper tool would be left unchanged, the set of stamps in the pop-up menu box from which the user can choose would be dependent upon the characteristics of the drawing activity.

[1029] It is a feature of the present invention that characteristics of the tools that can be invoked using selectable icons 201-209 on toolbar menu 112 are dependent on the identity and/or state of the activity to which it is being applied. This feature enables the core set of

tools to be flexibly and appropriately applied to the particular activity. To illustrate this aspect of the present invention, a description of an embodiment of the operation of hand-held electronic toy 100 is provided.

[1030] The high-level operation of hand-held electronic toy 100 is described with reference to the flowchart of FIG. 4. As illustrated, the process begins at step 402 when hand-held electronic toy 100 is powered on. At step 404, the hand-held electronic toy 100 identifies an applicable read-only memory (ROM). More specifically, hand-held electronic toy 100 determines whether an expansion cartridge 130 has been inserted into hand-held electronic toy 100. If an expansion cartridge 130 has not been inserted, then the activities of the base system software are presented to the user. If an expansion cartridge 130 has been inserted, then the activities supported by the inserted expansion cartridge are presented to the user. An example of an activity menu is illustrated in FIG. 5, which illustrates the menu of activities supported by the base system software.

[1031] At step 406, the activity menu is presented to the user. As illustrated, activity menu 500 includes activity selections 510, 520, 530, 540. Selection 510 is associated with a free drawing activity starting with a blank screen, selection 520 is associated with a scene starter activity that allows the user to select from several starter scenes, selection 530 is associated with a funny faces activity that allows the user to select from several starter funny faces, and selection 540 is associated with a connect-the-dots activity that allows the user to select from several connect-the-dots drawings.

[1032] At step 408, hand-held electronic toy 100 determines whether the user has selected an activity using stylus 120. If no activity has been selected it is then determined at